

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/044980 A2

- (51) International Patent Classification⁷: C12N
- (21) International Application Number: PCT/US2004/026162
- (22) International Filing Date: 12 August 2004 (12.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/494,764 13 August 2003 (13.08.2003) US
- (71) Applicant (for all designated States except US): **THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK** [US/US]; 110 Low Memorial Library, West 116th Street & Broadway, New York, NY 10027 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **GOFF, Stephen, P.** [US/US]; 66 Windsor Road, Tenafly, NJ 07670 (US). **GAO, Guanxia** [CN/CN]; Institute of Microbiology, Chinese Academy of Sciences, Beijing 100080 (CN).
- (74) Agent: **WHITE, John, P.**; Cooper & Dunham LLP, 1185 Avenue of the Americas, New York, NY 10036 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ZAP PROTEIN AND RELATED COMPOSITIONS AND METHODS

(57) Abstract: This invention provides an isolated ZAP protein and methods and articles of manufacture for increasing resistance to a virus in a subject or mammalian cell. The instant methods and articles are based on the use the ZAP protein to increase such resistance to a virus.

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/044980 A2

(51) International Patent Classification⁷: C12N

(21) International Application Number:
PCT/US2004/026162

(22) International Filing Date: 12 August 2004 (12.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/494,764 13 August 2003 (13.08.2003) US

(71) Applicant (for all designated States except US): **THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK** [US/US]; 110 Low Memorial Library, West 116th Street & Broadway, New York, NY 10027 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GOFF, Stephen, P.** [US/US]; 66 Windsor Road, Tenafly, NJ 07670 (US). **GAO, Guanxia** [CN/CN]; Institute of Microbiology, Chinese Academy of Sciences, Beijing 100080 (CN).

(74) Agent: **WHITE, John, P.**; Cooper & Dunham LLP, 1185 Avenue of the Americas, New York, NY 10036 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

(48) Date of publication of this corrected version:

24 November 2005

(15) Information about Correction:

see PCT Gazette No. 47/2005 of 24 November 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ZAP PROTEIN AND RELATED COMPOSITIONS AND METHODS

(57) Abstract: This invention provides an isolated ZAP protein and methods and articles of manufacture for increasing resistance to a virus in a subject or mammalian cell. The instant methods and articles are based on the use the ZAP protein to increase such resistance to a virus.



WO 2005/044980 A2